CLAIMS

1. A method for testing digital content comprising:

requesting a test data file;

receiving the test data file, the test file identifying a streaming media server and digital content;

locating the streaming media server identified in the test data file;

requesting from the streaming media server the digital content identified in the test data file;

testing the playback operation of the digital content, wherein the testing generates a plurality of test results; and

causing to be stored the plurality of test results in a storage device.

2. The method according to claim 1, wherein requesting the test data file occurs in response to a request from a client test machine, the method further comprising:

performing a trace route test between the client test machine and the streaming media server; and

storing a result of the trace route test.

3. The method according to claim 2 further comprising:

performing a bandwidth test between the client test machine and the streaming media server; and

storing a result of the bandwidth test on the client test machine.

4. The method according to claim 1 wherein testing the operation further comprises:

calculating a time to locate the streaming media server identified in the system test file and;

calculating a time to connect to the streaming media server identified in the system test file.

5. The method according to claim 1 wherein testing the operation further comprises:

calculating a time to connect to the digital content file identified in the system test file; and

calculating a time when the digital content file identified in the system test file is ready to play.

6. The method according to claim 1 further comprising forwarding the test results to an application server via a network for analysis.

7. The method according to claim 1 further comprising sorting the test results based upon at least one category of test results.

8. The method according to claim 1 further comprising sorting the test results in descending order based upon a percentage error category.

9. The method according to claim 8 further comprising sending a message to an administrator if the percentage error for a streaming media server is greater than a predetermined threshold value.

10. The method according to claim 2 further comprising sorting the test results based upon a geographic region where the client test machine is physically located.

11. A graphical interface for monitoring digital content, the interface comprising:

a first display window configured to present real time communication between a client test machine and a streaming media server; and

a second display window configured to display a status of a digital content test.

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12. The graphical interface for monitoring digital content according to claim 11, the interface further comprising:

a third display window configured to display the digital content.

13. A computer-readable medium having embodied therein a computer program for executing a method of monitoring digital content comprising:

requesting a system test file, the test file having a streaming media server identifier and a digital content file identifier;

locating a streaming media server based on the streaming media server identifier in the system test file;

requesting the digital content file from the streaming media server based on the digital content file identifier contained in the test file;

testing operation of the digital content; and

storing a plurality of test results in the a storage device.

14. The computer-readable medium according to claim 13, wherein testing the operation further comprises:

calculating a time to locate the streaming media server identified in the system test file; and

calculating a time to connect to the streaming media server identified in the system test file.

15. The computer readable medium according to claim 13 further comprising:

calculating a time to connect to the digital content identified in the system test file; and

calculating a time when the digital content identified in the system test file is ready to play.

16. The computer readable medium according to claim 13, further comprising forwarding test results to an application server via a network for analysis.

17. The computer-readable medium according to claim 14, further comprising sorting the test results based upon at least one category of test results.

18. The computer-readable medium according to claim 13 further comprising sorting the test results based upon a geographic region where the client test machine is physically located.

19. A method for monitoring digital content from a client test machine comprising:

receiving a system test file, the test file having a digital content identifier;

requesting the digital content using the digital content identifier contained in the system test file;

testing the operation of the digital content;

obtaining a plurality of test results corresponding to the digital content; and

storing the plurality of test results in a storage device.

20. A method for testing digital content in response to a request from a client test machine comprising:

requesting a test data file;

receiving the test data file, the test file identifying a streaming media server and digital content;

locating the streaming media server identified in the test data file;

requesting from the streaming media server the digital content identified in the test data file;

testing the playback operation of the digital content, wherein the testing generates a plurality of test results;

causing to be stored the plurality of test results in a storage device; and

sending a message to an administrator if the a test result is greater than a predetermined threshold value.

21. The method according to claim 20 further comprising:

sorting the test results in descending order based upon a percentage error category; and

sending a message to an administrator if the percentage error for a streaming media server is greater than a predetermined threshold value.

22. The method according to claim 21 further comprising identifying an alternate streaming media server to the client test machine if the streaming media server identified in the test file has a percentage error that is greater than a predetermined threshold value.

23. The method according to claim 22 further comprising preventing further access to the streaming media server whose percentage error is greater than a predetermined threshold value.

24. A method for testing digital content comprising:

sending a test data file to at least one client test machine, the test file identifying a streaming media server and digital content;

locating the streaming media server identified in the test data file;

requesting from the streaming media server the digital content identified in the test data file;

testing the playback operation of the digital content, wherein the

testing generates a plurality of test results; and

       causing to be stored the plurality of test results in a storage device.

    25. A method for testing digital content comprising:

       sending a test data file to a plurality of client test machines, the test file identifying a streaming media server and digital content;

       locating the streaming media server identified in the test data file;

       requesting from the streaming media server the digital content identified in the test data file;

       testing the playback operation of the digital content, wherein the testing generates a plurality of test results; and

       causing to be stored the plurality of test results in a storage device.

    26. The method according to Claim 25 further comprising forwarding the plurality of test results from each client test machine to an application server for analysis.

    27. The method according to Claim 25 wherein each test data file is unique.

    28. The method according to Claim 25 wherein each test data file is stored in a queue and sent to each client test machine based upon a first-in-first-out method.

    29. The method according to Claim 26 further comprising aggregating the plurality of test results and performing a mathematical algorithm on one or more of the aggregated test results to generate statistical information.

    30. The method according to Claim 26 further comprising client test machines each having a particular top level IP address and wherein the application server generates a report containing an analysis of the plurality of test results from each client test machine.

    31. A system for monitoring electronic delivery of digital content, the system comprising:

one or more client test machines configured to:

request a test data file, the test data file having at least a URL f

field with a URL identifying the digital content,

receive the test data file,

test the digital content identified in the test data file, wherein

the testing generates a plurality of test results including a time to

connect to the digital content identified in the test data file, and

cause to be stored the plurality of test results in a storage

device;

one or more streaming servers configured to read digital content and to

provide the digital content to the client test machines;

one or more application servers configured to provide at least one of a

plurality of test data files to one or more of the client test machines and to receive the

plurality of test results from the client test machines, and

a network for interconnecting the client test machines, streaming

servers and the application servers to each other.

32. A system for monitoring electronic delivery of digital content, the system

comprising:

a plurality of client test machines configured to receive and to test

digital content, wherein the testing generates a plurality of test results;

one or more streaming servers configured to read digital content and to

provide the digital content to the client test machines; and

one or more application servers configured to provide at least one of a

plurality of test data files to one or more of the client test machines, said test data file

having at least a URL field with a URL identifying the digital content and wherein the

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application server is further configured to receive and to store the plurality of test results obtained from testing the digital content by the client test machine.

33. The system according to claim 32 wherein the application server is further configured to aggregate the plurality of test results and to generate an alert if any of the test results are above or below a predetermined threshold.

34. The system according to claim 33 wherein the application server is further configured to perform a mathematical algorithm on one or more of the aggregated test results to generate statistical information and to generate a report containing an analysis of the statistical information.

35. A system for monitoring electronic delivery of digital content, the system comprising:

one or more client test machines configured to receive and to test digital content, wherein the testing generates a plurality of test results;

one or more streaming servers configured to read digital content and to provide the digital content to the client test machines; and

one or more application servers configured to provide at least one of a plurality of test data files to one or more of the client test machines, said test data file having at least a field identifying the digital content

36. The system according to claim 35, wherein the client test machine is configured to request the test data file from the application server and to transmit the plurality of test results to the application server obtained from testing the digital content.

37. The system according to claim 35, wherein the client test machine is configured to store the plurality of test results obtained from testing the digital content.

38. The system according to claim 35, wherein the client test machine is configured to calculate and to store a time to connect to the digital content identified in the test data file.

39. The system according to claim 35, wherein the client test machine is configured to store calculate and to store a time indicating when the digital content identified in the test data file is ready to be delivered.

40. The system according to claim 35, wherein the test data file contains at least one of a streaming server IP field, a steaming server DNS field, a streaming server URL field or a test name field.

41. The system according to claim 40, wherein the client test machine is configured to calculate and to store a time to locate the server identified in the test data file.

42. The system according to claim 40, wherein the client test machine is configured to play at least a portion of the digital content identified in the test data file and to calculate and to store a time to connect to the server identified in the test data file.

43. The system according to claim 40, wherein the test data file further comprises a test length field having a value for a length of the test to perform and wherein the test machine is configured to play the digital content for the length of the test.

44. The system according to claim 42, wherein the test machine is configured to play the digital content in its entirety.

45. The system according to claim 35, wherein the application server is configured to receive and to store a plurality of test results obtained from testing the digital content by the client test machine.

46. The system according to claim 35, wherein the application server further comprises a database to store the plurality of test data files.

47. The system according to claim 45, wherein each of the plurality of test results includes at least one of a streaming server field, an originating IP field, a filer field, a percentage error field and a share field, and wherein the application server is configured to sort the plurality of test results according to at least one field.

48. The system according to claim 35, further comprising one or more storage devices configured to store digital content.

49. The system according to claim 48, wherein the storage device is a filer server configured to store fixed digital content.

50. The system according to claim 48, wherein the storage device is contained within the streaming server.

51. The system according to claim 35, further comprising:

a video camera for recording audio-video data; and

at least one encoder, connected to the camera, configured to interface the camera with one or more of the streaming servers, the video camera and encoder providing the digital content.

52. A method for testing digital content, the method comprising:

generating at least one test data file;

sending the test data file to a plurality of client test machines, the test data file identifying a streaming server and digital content;

locating the streaming server identified in the test data file;

requesting from the streaming server the digital content identified in the test data file;

testing the playback operation of the digital content, wherein the testing generates a plurality of test results.

53. The method according to claim 52, wherein generating the test data file further comprises:

storing digital content on at least one filer server;

creating a unique stream ID for each digital content on each filer server;

determining the number of available streaming servers to broadcast the digital content;

creating a unique test data file for each piece of digital content where the test data file contains at least one of a streaming server IP field, a steaming server DNS field, a streaming server URL field or a test name field.

54. The method according to claim 52, wherein generating the test data file further comprises:

storing digital content on at least one filer server;

creating a master test having a unique master test ID for the digital content;

determining the number of available streaming servers to broadcast the digital content;

creating a unique test data file for each piece of digital content on each filer server available to broadcast the digital content by copying the master test data file and storing descriptive information in at least one of a streaming server IP field, a steaming server DNS field, a streaming server URL field or a test name field.

55. The method according to claim 54 further comprising storing the unique test data files in a queue.

56. The method according to claim 52, wherein generating the test data file further comprises restoring the test data files from a backup copy of previously generated test data files.